INDEX TO VOL. XXXVI (A)

AUTHORS' INDEX

Anantakrishnan, S. V. .. Kinetic studies in ester hydrolysis, VII, 201.

Anantakrishnan, S. V. and Pai, K. V. Srinivasa — The Kjeldahl method of nitrogen determination, 299.

Balakrishna, S. .. Sound velocities in some Indian rock specimens, 375.

Bannerjee, N. R. and Seshadri, T. R. — Synthetic experiments in the benzopyrone series, XVIII, 134.

Batra, P. C. .. *See* Puntambeker and Batra.

Beri, R. M. .. *See* Rao and Beri.

Bhatnagar, C. and Bhawalkar, D. R. — Studies in electrets, I, 170.

Bhawalkar, D. R. .. *See* Bhatnagar and Bhawalkar.

Chandrasekhar, S. .. Some remarks on the optical rotary dispersion of quartz, 118.

Chowdhuri, B., Saxena, R. C. and Subramanian, A. — On the penetrating component in air showers, 457.

Datar, M. G. .. *See* Prasad and others.

Deshpande, S. M. .. *See* Sahasrabudhey and others.

Divatia, A. S. .. *See* Trivedi and others.

Doss, K. S. G. and Gupta, S. L. — Behaviour of surface-active substances at the dropping mercury electrode, 493.

Doss, K. S. G. and Saraswat, H. C. — Surface films of invertase, 343.

Gakhar, K. L. .. *See* Rao and Gakhar.

Gupta, S. L. .. *See* Doss and Gupta.

Ishaq, Mohd. .. *See* Shah and Ishaq.

Jain, A. C., Seshadri, T. R. and Thiruvengadam, T. R. — Nuclear oxidation in flavones and related compounds, XL, 217.

Jha, S. .. On the formation of alpha-particles in radioactive nuclei, 472.

Karmarkar, S. S., Shah, K. H. and Venkataraman, K. — Synthetical experiments in the chromone group, XXVI, 552.

Kartha, Gopinath .. Structure of halogenates of the type A $(BO_3)_2 H_2O$, I, 501.

Khanolkar, D. D. ..	*See* Prasad and others.
Krishnamoorthy, P. N. ..	*See* Taylor and others.
Krishnamurti, D. ..	*See* Raman and Krishnamurti.
Lal, B. B. ..	Photochemical after-effect in the bromine-oxalate reaction, 148.
	Photochemical after-effect in H_2O_2-$K_4Fe.(CN)_6$ reaction, 244.
Lal, D., Pal, Yash, Peters, B. and Swami, M. S.	Production and interaction of mesons at very high energies, 75.
Manikarnikamma, S. N.	The second curvature of a geodesic on a hypersurface of a Riemannian space, 175.
Murthy, A. R. Vasudeva	Studies in the chemical behaviour of some compounds of sulphur, I, II, III, 388, 425, 537.
Muthuswami, T. N. ..	Niggli's principles of igneous petrogenesis, 1.
Naranan, S. ..	*See* Srikantan and Naranan.
Narasimhachari, N., Rajagopalan, D. and Seshadri, T. R.	A new effect of hydrogen bond formation (chelation), IV, 231.
Narasimhachari, N., Seshadri, T. R. and Sethuaraman, S.	Synthetic experiments in the benzopyrone series, XIX, 194.
Neelakantam, K. and Parthasarathi, K.	Volumetric determination of manganese with 8-hydroxy-quinoline, 123.
Pai, K. V. Srinivasa ..	*See* Anantakrishnan and Pai.
Pal, Yash ..	*See* Lal and others.
Panicker, A. R. ..	*See* Singh and others.
Pankajamani, K. S. and Seshadri, T. R.	Survey of anthoxanthins, I, 157.
Parameswaran, M. R. ..	Some converse theorems on summability, 363.
Parthasarathi, K. ..	*See* Neelakantam and Parthasarathi.
Patani, M. J. ..	*See* Trivedi and others.
Peters, B. ..	*See* Lal and others.
Prasad, Mata, Khanolkar, D. D. and Datar, M. G.	Magnetic study of double salts in solution, 544.
Prasad, Raghu ..	Preliminary observations on the temperature gradients and light penetration in the upper 200 feet of water of the Bay of Bengal, 61.

Puntambekar, S. V. and Batra, P. C. .. Chemical examination of the fatty oil from the seeds of *Steculia urens* Roxb., 284.

Rabindran, K., Sunthankar, A. V. and Tilak, B. D. A new synthesis of thiophenes and thiapyrans, VII, 405.

Rabindran, K. and Tilak, B. D. Thiophenes and thiopyrans, VIII, 411.

Raizada, P. S. .. *See* Saksena and Raizada.

Rajagopalan, D. .. *See* Narasimhachari and others.

Ramakrishna, B. S. .. *See* Rao and Ramakrishna.

Raman, C. V. and Krishnamurti, D. On the iridescence of potassium chlorate crystals, I, II, III, 315, 321, 330.

On the polarisation and spectral character of the iridescence of potassium chlorate crystals, 419.

Ramaseshan, S. and Suryan, G. Paramagnetic resonance in some cupric salts, 211.

Ramdas, A. K. .. The infra-red absorption spectrum of potassium chlorate crystals, II, 55.

Ranganathan, M. K. .. *See* Singh and others.

Rao, G. Venkat and Seshadri, T. R. A note on the biogenesis of pedicin, 130.

Rao, P. S. and Beri, R. M. Analysis of amino acids using paper chromatography (horizontal migration), 370.

Rao, P. S. and Gakhar, K. L. Studies on tuber hemicelluloses, II, 70.

Rao, R. V. Gopal .. *See* Sahasrabudhey and others.

Rao, S. K. Lakshmana, and Ramakrishna, B. S. Certain trigonometric summations, 208.

Sahasrabudhey, R. H., Deshpande, S. M., and Rao, R. V. Gopal Oxidation of ethanol under silent electric discharge, 258.

Saksena, B. D. and Raizada, P. S. Ring frequencies of dioxane and trioxane, 267.

Saraswat, H. C. .. *See* Doss and Saraswat.

Aging of surfaces of invertase solutions, 381.

Saxena, R. C. .. *See* Chowdhuri and others.

Sehgal, J. M. and Seshadri, T. R. Nuclear oxidation in flavones and related compounds, XLI, 355.

Seshadri, T. R. .. *See* Rao and Seshadri.

See Bannerjee and Seshadri.

See Pankajamani and Seshadri.

See Narasimhachari and others.

See Jain and others.

See Sehgal and Seshadri.

Sethuraman, S. .. *See* Narasimhachari and others.

Shah, K. H. .. *See* Karmarkar and others.

Shah, S. M. and Ishaq, Mohd. — Quasi-monotone series and an extension of Dvoretzky's theorem, 402.

Singh, B. K., Panicker, A. R. and Ranganathan, M. K. — Studies on the nature of the racemic modifications of optically active compounds in the solid state, IX, 440.

Sitaramaswami, M. .. *See* Taylor and others.

Sreedhar, A. K. .. Thermal expansion of crystals at low temperatures, I, 141.

Sreekantan, B. V. .. Life-time of μ-mesons, 289.

Srikantan, B. V. and Naranan, S. — Cosmic rays underground, 97.

Srinivasan, N. R. .. Studies on niobium and tantalum, IV, V, 185, 278.

Subramanian, A. .. *See* Chowdhuri and others

Sunthankar, A. V. .. *See* Rabindran and others.

Suryan, G. .. *See* Ramaseshan and Suryan.

Swami, M. S. .. *See* Lal and others

Taylor, H. J., Sitaramaswami, M., and Krishnamoorthy, P. N. — High altitude balloon experiments and measurement of the heavy primary radiation flux at the geometric equator, 41.

Thiruvengadam, T. R. .. *See* Jain and others.

Thosar, Y. V. .. On recurrence relations involving Legendre's associated functions of one kind only, 128.

Tilak, B. D. .. *See* Rabindran and others.

See Rabindran and Tilak.

Trivedi, A. K. M., Divatia, A. S. and Patani, M. J. — Studies in iron oxide sols, I, 530.

Udgaonkar, B. M. .. Relativistic field quantization, 482.

Venkataraman, K. .. *See* Karmarkar and others.

Viswanatham, B. .. On the asymptotic behaviour of solutions of non-linear differential equations, 335.

Viswanathan, K. S. .. The characteristic vibrations of a rectangular lattice, 306.

TITLE INDEX

Alpha-particles in radioactive nuclei, on the formation (Jha), 472.

Amino acids, analysis, using paper chromatography (horizontal migration) (Rao and Beri), 370.

Anthoxanthins, survey, I (Pankajamani and Seshadri), 157.

Benzopyrone series, synthetic experiments, XVIII (Bannerjee and Seshadri), XIX (Narasimhachari and others), 134, 194.

Biogenesis of pedicin, a note (Rao and Seshadri), 130.

Chromone group, synthetical experiments, XXVI (Karmarkar and others), 552.

Cosmic rays underground (Srikantan and Naranan), 97.

Differential equations, non-linear solutions, on the asymptotic behaviour (Viswanathan), 335.

Electrets, studies, I (Bhatnagar and Bhawalkar), 170.

Ethanol, oxidation, under silent electric discharge (Sahasrabudhey and others), 258.

Halogenates of the type A $(BO_3)_2.H_2O$, structure, I (Kartha), 501.

High altitude balloon experiments and measurement of the heavy primary radiation flux at the geomagnetic equator (Taylor and others), 41.

Hydrogen bond formation (chelation), a new effect, IV (Narasimhachari and others), 231.

Infra-red absorption spectrum of potassium chlorate crystals, II (Ramdas), 55.

Iridescence of potassium chlorate crystals, I, II, III (Raman and Krishnamurti), 315, 321, 330.

Iridescence of potassium chlorate crystals, on the polarisation and spectral character (Raman and Krishnamurti), 419.

Iron oxide sols, studies, I (Trivedi and others), 530.

Kinetic studies in ester hydrolysis, VII (Anantakrishnan), 201.

Optically active compounds in the solid state, racemic modifications, studies on the nature, IX (Singh and others), 440.

Optical rotary dispersion of quartz, some remarks (Chandrasekhar), 118.

Magnetic study of double salts in solution (Prasad and others), 544.

Manganese, volumetric determination, with 8-hydroxy-quinoline (Neelakantam and Parthasarathi), 123.

Mesons, production and interaction, at very high energies (Lal and others), 75.

μ-Mesons, life-time (Sreekantan), 289.

Niggli's principles of igneous petrogenesis (Muthuswami), 1.

Niobium and tantalum, studies, IV, V (Srinivasan), 185, 278.

Nitrogen determination, kjeldahl method (Anantakrishnan and Pai), 299.

Nuclear oxidation in flavones and related compounds, XL (Jain and others), XLI (Sehgal and Seshadri), 217, 355.

Paramagnetic resonance in some cupric salts (Ramaseshan and Suryan), 211.

Penetrating component in air showers (Chowdhuri and others), 457.

Photochemical after-effect in the bromine-oxalate reaction (Lal), 148.

Photochemical after-effect in H_2O_2–$K_4Fe(CN)_6$ reaction (Lal), 244.

Quasi-monotone series and an extension of Dvoretzky's theorem (Shah Ishaq), 402.

Rectangular lattice, the characteristic vibrations (Viswanathan), 306.

Recurrence relations involving Legendre's associated functions of one kind only (Thosar), 128.

Relativistic field quantization (Udgaonkar), 482.

Riemannian space, hypersurface, the second curvature of a geodesic (Manikarnikamma), 175.

Ring frequencies of dioxane and trioxane (Saksena and Raizada), 267.

Sound velocities in some Indian rock specimens (Balakrishna), 375.

Steculia urens Roxb., seeds of, fatty oil from, chemical examination (Puntambekar and Batra), 284.

Sulphur, some compounds, chemical behaviour, studies, I, II, III (Murthy), 388, 425, 537.

Summability, some converse theorems on (Parameswaran), 363.

Surface-active substances, behaviour, at the dropping mercury electrode (Doss and Gupta), 493.

Surfaces, aging, invertase solutions (Saraswat), 381.

Surface films of invertase (Doss and Saraswat), 343.

Temperature gradients and light penetration in the upper 200 feet of water of the Bay of Bengal, preliminary observations (Prasad), 61.

Thermal expansion of crystals at low temperatures, I (Sreedhar), 141.

Thiophenes and thiapyrans, a new synthesis, VII (Rabindran and others), VIII (Rabindran and Tilak), 405, 411.

Trigonometric summations, certain (Rao and Ramakrishna), 208.

Tuber hemicelluloses, studies, II (Rao and Gakhar), 70.